

***LOS Goal Determination  
and Force Transition  
Model Tool Kit for  
Enlisted Force Planning  
and Policy Analysis***

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Conference,**



# ***Sea Warrior and CNP Force Shaping Guidance & Issues***

- ✓ **Have Right Quantity of Sailors**
- **Need**
  - Proper Skill Mix
  - 97% to 103% Manning
- **What should the experience mix look like?**
- **How to move towards the experience mix goal?**
  - By When?
  - What are the force shaping alternatives / tradeoffs?

# ***Recent Strides and Current Problem***

- **Retention Goal Numbers vs. Rates**
  - Numbers provide more meaningful targets for coordination of retention efforts
  - Identifies current strength and EPA/BA gap by LOS
  - Facilitates “surgical” application of retention resources
- **LOS Goal Distributions for Scarce Reenlistment Incentives Not Sufficiently Founded on Personnel Flows/Behaviors and Navy Policy**
  - Generally proportional to current strength
  - Uncertain sustainability
  - Not produced by a standardized methodology

# ***Objective Force Goal Solution***

- **Definition**

- Crosswalk between Paygrade-based manpower requirements and LOS-based inventory
- Steady state personnel inventory distribution
- Feasible force structure
- Current continuance behavior and advancement system

- **Purpose**

- Goal for force planning and policy development

- **Applicability**

- Community Management and Strength Planning
- SRB Planning and Retention Goaling
- CREO Management and Advancement Planning

# ***Objective Force Model (OFM)***

## ***Goal Development***

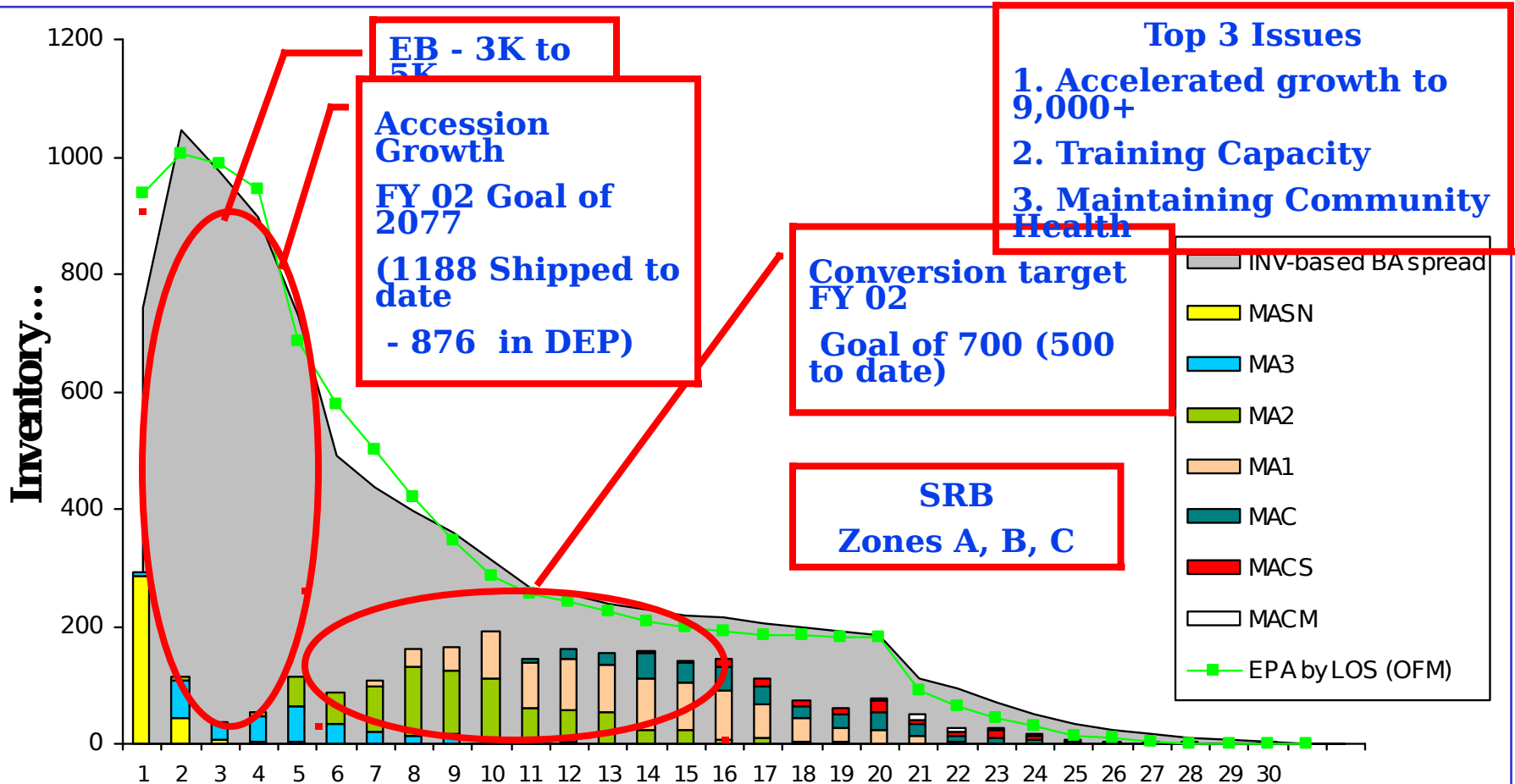
- **An effective Force Planning & Policy Development Tool**
  - Determines feasible, sustainable paygrade *by LOS* experience mix that meets EPA/BA
  - Defines more precise LOS Goals for Retention Goaling
  - Provides standard methodology framework
  - Supports what-if drills, e.g., Top 6%, HYT
- **Proven utility**
  - Proof of concept based on proven modeling approach
  - Used by N1 to develop ALNAV stretch reenlistment goals
  - Supports N132C and N13T in other planning & policy drills
  - Planned utilization with CNA's ROI factors

## *Current OFM Initiatives*

- **Objective Force Tool R&D for skills**
  - Explore expansion of OFM to EMC and NEC levels
  - Review current methods
  - Develop proof of concept for sample skills
  - Obtain and incorporate feedback

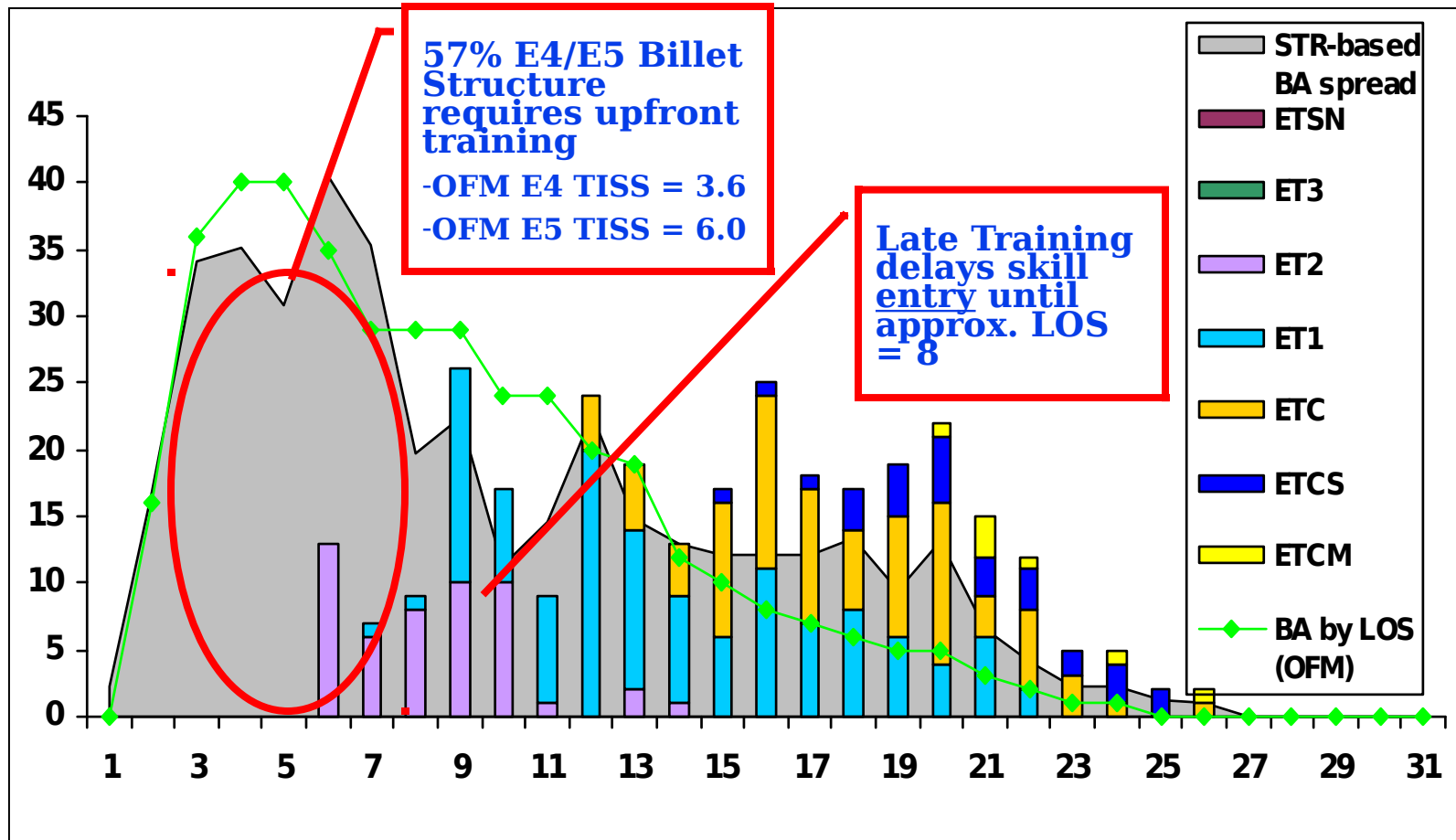
# ***Objective Force Model Algorithm***

- **Begins with EPA/BA goals and certain characteristics of the enlisted force**
  - inputs that quantify continuation & advancement behavior
  - policy constraints
- **Produces a feasible steady-state force structure**
  - LOS by paygrade force that best meets strength goals by paygrade by performing directed search for:
    - distribution of advancements, and
    - changes in zone continuance rates
- **OFM systematically produces young sustainable goal forces for given policy set**
  - first meet Topsix goal, then Topfive, then Topfour, etc.
  - try Advancement changes, then retention changes as required



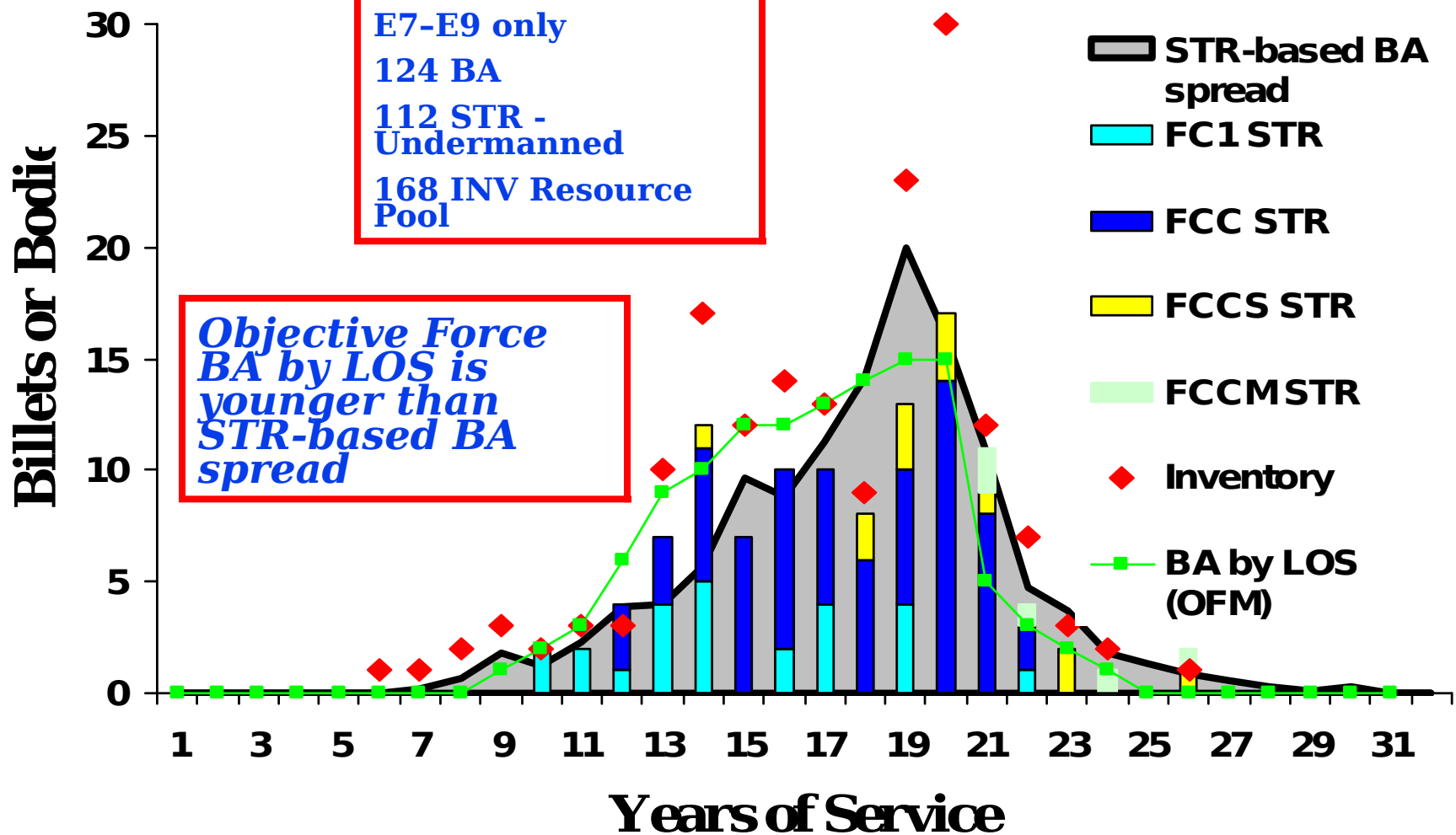


# Equipment Maintenance Electronics Technicians (ETR-14EM) Billet / Training





# FC-1332 Length of Service Cell Analysis by Paygrade



# ***Moving Towards the Experience Mix Goal***

## **Leverage Existing N13 SKIPPER-III Skill-level Force Transition Technology**

- Proven Utility in Enlisted Plans & Policy Branch
- Easy to Use Interface
  - New visual and cognitive techniques facilitate usage and understanding
  - “Open Box” Model
- Web-based
- Integrated, Expandable Modeling Framework
  - Multi-year Inventory Projection (Operational)
  - Recruit/A-School Optimization and Conversion Planning (Operational)
  - ALNAV LOS Force Planning Capabilities (Operational)
  - Advancement and Rotation Models (in R&D)
- **Retention Goaling Proof of Concept**
- **Portal Prototype for Work Process, Data and Tool Integration**
- **Straightforward Development Path to Explore Force Shaping Alternatives**

# SKIPPER "Open Box" UI & A-School Planning

SKIPPER Data Driven - Microsoft Internet Explorer

Address: http://empips.dyncorp.com/skipperiii/datadriven.asp

Skill: MMSW (B130) Scenario: MM FY04 School Plan: MM FY04 Accession Plan  
 Skill Level: EMC Model: Rotation Data: Total Non-School Gains

Begin Inventory → Apply Continuation Rates → Survivors  
 At-Risk Percents → Compute Continuation Rates → Continuation Rates  
 At-Risk Continuation Rates → Compute Continuation Rates  
 Not At-Risk Continuation Rates → Compute Continuation Rates  
 School Gains → Compute Gains  
 Non-School Gains → Compute Gains  
 EPA → Adjust Tours → Tour-Adjusted Inventory → Sea Rotation Probabilities

Legend:  
 A-School Model Specific (Blue)  
 Advancement Model Specific (Yellow)  
 Rotation Model Specific (Green)

SKIPPER Data Driven - Microsoft Internet Explorer

Address: http://empips.dyncorp.com/skipperiii/datadriven.asp

Skill: MMSW (B130) Scenario: MM FY04 School Plan: MM FY04 Accession Plan  
 Skill Level: EMC Model: Rotation Data: Total Non-School Gains

School Plan

Copy to Future FYs | Optimize School Inputs | Save School Plan | Load a Different School Plan | View Female Breakout

	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
School Lengths									
6Y0 A-School	12	12	12	12	12	12	12	12	12
Limit	2,850	2,850	2,850	2,850	2,850	2,850	2,850	2,850	2,850
Attrition	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
4Y0 A-School	0	0	0	0	0	0	0	0	0
6Y0 A-School	0	0	0	0	0	0	0	0	0
4Y0									
CNRC	730	677	661	680	806	742	819	904	901
Fleet Input	0	30	30	80	30	30	30	30	30
Jobs Input	0	0	0	0	0	0	0	0	0
College Fund	0	0	0	0	0	0	0	0	0
NTSP	0	0	0	0	0	0	0	0	0
Misc. Input	0	0	0	0	0	0	0	0	0
Input to TASP	0	0	0	0	0	0	0	0	0
6Y0									
Direct Input	0	0	0	0	0	0	0	0	0
Input to TASP	0	0	0	0	0	0	0	0	0
Gains									
Non-School	531	531	531	531	531	531	531	531	531
A-School	979	683	666	714	785	755	797	877	894
Total	1,510	1,214	1,197	1,245	1,316	1,286	1,328	1,408	1,425
Inventory	7,910	7,641	7,352	7,101	6,902	6,769	6,691	6,709	6,767
Target EPA (100%)	8,008	7,642	7,354	7,318	6,928	6,771	6,771	6,771	6,771
Inv/Target EPA (%)	98.77	99.98	99.97	97.03	99.62	99.97	98.81	99.08	99.94
EPA	8,008	7,642	7,354	7,318	6,928	6,771	6,771	6,771	6,771
Inventory/EPA (%)	98.77	99.98	99.97	97.03	99.62	99.97	98.81	99.08	99.94

Done

# Retention Goaling Proof of Concept

- Select Model
- A-School
- Advancement
- Rotation
- Checklists
- A-School
- Quick Links
- Change Skill
- Change Scenario
- Load School Plan
- View/Edit Input Data
- View Active Overrides
- Save Scenario
- View Inventory Detail
- View Detailed Results
- Export Data
- Log Out
- Miscellaneous
- Data Descriptions
- Date of Last Data Update
- FAQ
- Contact Us
- Advanced Links
- Retention Goaling

**Skill:** MMSW (B130) **Scenario:** MM FY04 **School Plan:** MM FY04 Accession Plan

**Skill Level:** EMC **Model:** Rotation **Data:** CFY+2 EPA By LOS

## Retention Goaling

	Actual Begin CFY LOS 3-4 Inv	Projected End CFY LOS 4-5 Inv
<b>At-Risk</b>	720	
Re-enlistment Forecast (Current Conditions)		363
New Re-enlistment Incentives		357
Re-enlistment Goal for CFY		720
<b>Not-At-Risk</b>	982	
Survivors		874
<b>School Gains</b>		30
<b>Lateral and Gendet Gains</b>		95
<b>Total Inventory</b>	1,702	1,719
<b>EPA (LOS 5-6)</b>		
<b>EPA - Inv (LOS 5-6)</b>		
<b>Total Losses (includes Lateral Losses)</b>		108
Not-At-Risk		108
At-Risk		0

Note: 1133 re-enlistments are needed in CFY (Projected End CFY LOS 4-5 Inv) in order to meet the goal.

Click "View Unconstrained Re-enlistments Needed" button to unconstrain this projection.

View Unconstrained Re-enlistments Needed    Add/Change School Plan Data

- Select Model
- A-School
- Advancement
- Rotation
- Checklists
- A-School
- Quick Links
- Change Skill
- Change Scenario
- Load School Plan
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- Retention Goaling

**Skill:** MMSW (B130) **Scenario:** MM FY04 **School Plan:** MM FY04 Accession Plan

**Skill Level:** EMC **Model:** Rotation **Data:** Begin Inventory

Data shown is actual for fiscal year 2002, and projected for subsequent years.

Select data to view:

☐ LOS ☐ PG ☐ TD ☐ QTR ☐ ADV

	B-3	E-4	E-5	E-6	E-7	E-8	E-9	Total
1	351	16	2	0	0	0	0	369
2	555	254	0	0	0	0	0	809
3	169	770	7	0	0	0	0	946
4	37	666	53	0	0	0	0	756
5	16	384	108	1	0	0	0	509
6	10	234	179	1	0	0	0	424
7	5	137	176	4	0	0	0	322
8	2	77	137	12	0	0	0	228
9	0	34	133	12	0	0	0	179
10	3	16	132	21	0	0	0	172
11	0	15	107	35	2	0	0	159
12	0	5	97	52	4	0	0	158
13	0	1	51	53	11	0	0	116
14	0	0	55	116	23	1	0	195
15	0	0	55	155	51	1	0	262
16	0	2	50	141	83	2	0	278
17	0	2	57	255	99	10	2	425
18	0	0	35	181	88	14	0	318
19	0	0	24	169	96	21	1	311
20	0	0	33	209	128	24	4	398
21	0	0	8	80	81	33	8	210
22	0	0	1	29	62	23	14	129
23	0	0	0	4	49	20	10	82
24	0	0	0	0	32	20	14	66
25	0	0	0	0	1	9	11	21
26	0	0	0	0	3	6	11	20

Chart Properties -> Right Click on Mouse

# EMPIPS Portal & Force Health Monitor

SAP Portals Enterprise Portal 5.0 - Microsoft Internet Explorer

Address: http://empips2.dyncorp.com/sapportal

**Force Health Monitor**

My Wel

	DC	EMSW	EN	GS	GSE	GSM	HT	ICSW	MM
Strength									
Reenlistments									
PG Dist									
Sea-Shore Dist									
LOS Dist									

**Model Data Integrator**

Search Criteria: Skill Code: ALNAV, Datalog: All, Data Origin: All

Available Data: PG, LOS, Rotation, Gender, SRBZon

**Tool Launcher**

- Policy Formulation
  - Recruiting
  - SKIPPER-III
- Reports
  - Billet Structure
  - Web Target

SKIPPER Data Driven - Microsoft Internet Explorer

Address: http://empips.dyncorp.com/skipperii/datadriven.asp

Skill: MMSW (B130), Skill Level: EMC, Scenario: MM FY04, Model: Rotation, School Plan: MM FY04 Accession Plan, Data: Total Non-School Gains

PG	Inventory Projections									
LOS	FY02	9/02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
1 - 6	3,813	3,813	3,719	3,558	3,497	3,477	3,433	3,470	3,597	3,710
7 - 10	901	901	1,005	1,131	1,177	1,237	1,293	1,291	1,280	1,244
11 - 14	628	628	556	550	530	555	610	681	715	751
Other	2,568	2,568	2,361	2,113	1,897	1,633	1,433	1,249	1,117	1,062
B3	1,148	1,148	785	740	600	648	660	720	749	
E4	2,613	2,613	2,787	2,666	2,543	2,434	2,390	2,260	2,219	2,247
E5	1,500	1,500	1,542	1,485	1,476	1,426	1,409	1,410	1,409	1,409
E6	1,530	1,530	1,484	1,443	1,463	1,403	1,382	1,382	1,382	1,382
E7	812	812	770	751	748	730	723	723	723	723
E8	187	187	164	162	166	162	160	160	160	160
E9	120	120	109	105	105	99	97	96	96	97
Total	7,910	7,910	7,641	7,352	7,101	6,902	6,769	6,691	6,709	6,767
EPA	8,008	8,008	7,642	7,354	7,318	6,928	6,771	6,771	6,771	6,771
INV/EPA	98.7	98.7	99.9	99.9	97	99.6	99.9	98.8	99	99.9
Losses	0	0	1,375	1,379	1,386	1,398	1,306	1,288	1,265	1,242
Gains	1,510	1,510	1,106	1,091	1,134	1,200	1,172	1,210	1,284	1,299

Overrides: Skill, Data, Name, 03, 04, 05, 06, 07, 08, 09, 10

Health Measure History

MM Health Measure: Reenlistments

Explanation: Ratio health measures divide actual data by target data (here, Reenlistments / ReenlistmentTargets). A score of 1.0 is perfect.

Color key: Red Problem, Yellow Warning, Green Satisfactory

Show actual and target data: Reenlistments / ReenlistmentTargets for [Sep FY01]

Recommended actions

Reenlistments Ratio Health Measure Data

MM Reenlistments Compared To ReenlistmentTargets

Explanation: This graph compares Reenlistments to ReenlistmentTargets over time.

Health status color key: Red Problem, Yellow Warning, Green Satisfactory

Health measure history

Recommended actions

# ***Goal Determination and Force Transition Model Tool Kit***

- **OFM Determines Navy Experience Mix Goals**
  - Effective Goal Development Tool with Proven Utility
  - ALNAV Grade x LOS Strength Planning, Policy Development, Reenlistment Goal Development and Budget Justification
  - Skill-level OFM R&D
  - Demonstrated Feasibility at the EMC and NEC level
- **SKIPPER-III Provides Means to Transition towards Experience Mix Goals**
  - Leverage Proven N13 Inventory Projection Technology
  - Utilize Reenlistment Elasticities
  - Explore Force Shaping Plans, Policy & Cost/ROI Alternatives
  - Operationalize Retention Goaling
  - Integrate Work Process, Data & Tools through Portal Prototype

## ***Contact Information***

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